

Serial No.: 10/075,970

IN THE CLAIMS:

1. (Currently amended) An implantable or insertable medical device adapted to provide a controlled change in mechanical properties and biomechanical compatibility after being implanted or inserted into a patient comprising a biodegradable inner core material and a biodegradable covering material at least partially covering the inner core material; wherein the biodegradable inner core material is selected from a metallic material and a ceramic material, wherein the covering material substantially controls the rate at which the inner core material becomes flexible upon contact with bodily fluids, and wherein after insertion or implantation into a patient, the medical device becomes decreasingly rigid and increasingly biomechanically compatible with body tissue in contact with the device over time.
2. (Cancelled)
3. (Previously Presented) The medical device of claim 1, wherein the inner core material becomes increasingly flexible upon contact with body fluids.
4. (Cancelled)
5. (Currently amended) The medical device of ~~claim 4~~ claim 1, wherein the covering material is a hydrophobic surface erodable polymer.
6. (Previously presented) The medical device of claim 1, wherein the covering material is a polymer.
7. (Original) The medical device of claim 6 wherein the polymer is a shape memory biodegradable polymer.

Serial No.: 10/075,970

8. (Canceled)
9. (Previously Presented) The medical device of claim 1, wherein the inner core material comprises a metallic core.
10. (Previously Presented) The medical device of claim 1, wherein the inner core material comprises a ceramic core.
11. (Previously Presented) The medical device of claim 1, wherein the inner core material comprises a monofilament core.
12. (Previously Presented) The medical device of claim 1, wherein the inner core material comprises a multifilament core.
13. (Original) The medical device of claim 12, wherein the multifilament core comprises woven or braided filaments.
14. (Previously Presented) The medical device of claim 1, wherein the inner core material comprises a tubular structure.
15. (Original) The medical device of claim 14, wherein the tubular structure is micromachined or laser-cut.
16. (Previously Presented) The medical device of claim 1, wherein either or both of the inner core material and the covering material contains therein or thereon at least one therapeutic agent.
17. (Original) The medical device of claim 1, further comprising one or more additional coating layers.

Serial No.: 10/075,970

18. (Original) The medical device of claim 17, wherein any of said additional coating layers contains therein or thereon at least one therapeutic agent.
19. (Original) The medical device of claim 1, which is an intraluminal stent.
20. (Original) The medical device of claim 19, wherein the intraluminal stent is selected from the group consisting of coronary, biliary, tracheal, gastrointestinal, urethral, ureteral and esophageal stents.
21. (Original) The medical device of claim 20, wherein the stent is a self-expandable or balloon-expandable coronary stent.
- 22-45. (Cancelled)